

ABSTRACT OF THE DISCLOSURE

A drive unit with a drive and an electric machine, the drive being equipped with a drive shaft and the electric machine with a stator and a rotor. The rotor is coaxial to the stator and connected to the drive shaft for the transmission of torque, where the stator and the rotor interact with each other across an air gap, and where the drive shaft causes the rotor to execute a
5 wobbling motion. In a cross section parallel to the drive shaft, the geometric course of at least one of the two surfaces forming the boundaries of the air gap, i.e., the surface of the rotor or the surface of the stator, is designed so that it at least approximates the geometric slewing curve (V_R) described by the wobbling motion of the rotor.